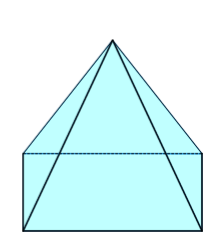
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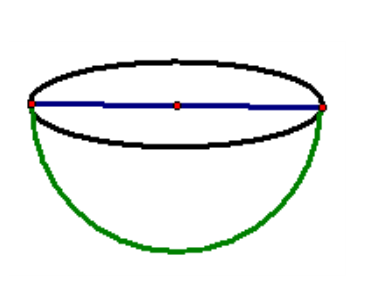
Area and Volume Review (Chapters 12 & 13)

Find p, B, LA, TA, and V for the following shapes.

r = 5 in

h = 8 in

1. Square Pyramid 2. Triangular Prism 3. Cylinder

 (Base is equilateral)

p = \_\_\_\_\_\_\_\_

B = \_\_\_\_\_\_\_\_

LA = \_\_\_\_\_\_\_

TA = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

8cm

p = \_\_\_\_\_\_\_\_

B = \_\_\_\_\_\_\_\_

LA = \_\_\_\_\_\_\_

TA = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

p = \_\_\_\_\_\_\_\_

B = \_\_\_\_\_\_\_\_

LA = \_\_\_\_\_\_\_

TA = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

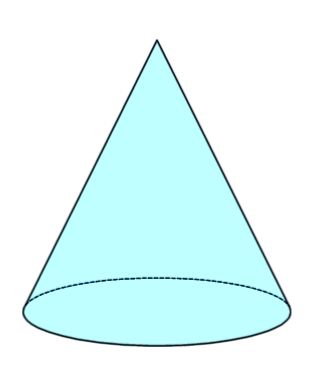


7cm

6cm

h = 4cm

l= 5cm

4. Cone 5. Sphere 6. Hemisphere

r = 2cm

h = 5cm

d = 6m

r = 4m

A = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

A = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

p = \_\_\_\_\_\_\_\_

B = \_\_\_\_\_\_\_\_

LA = \_\_\_\_\_\_\_

TA = \_\_\_\_\_\_\_

V = \_\_\_\_\_\_\_\_

(round answers for #4)



Use Pythagorean Theorem to find height and/or slant height.

10 cm

12 cm

7. Square pyramid 8. Regular Triangular Pyramid

l= \_\_\_\_\_\_ h = \_\_\_\_\_\_\_\_

h = \_\_\_\_\_\_ AB =

AV = 12 cm

9. A plane intersects a sphere 7 cm from the center. The radius of the sphere is 12cm. What is the area of the circle formed?

10. A plane intersects a sphere 15 cm from the center. The radius of the sphere is 18cm. What is the area of the circle formed?

11. A sphere has a volume of 972π in3. What is the radius?

12. A prism has a lateral area of 192cm2. The perimeter of the base is 24 cm. What is the height of the prism?

13. The volume of a square prism is 432cm3. The height is 2 x side of the square. What is the length of a side?

14. Two similar prisms have heights of 5cm and 9 cm.

What is the scale factor?\_\_\_\_\_\_\_\_\_\_\_\_

What is the ratio of perimeters?\_\_\_\_\_\_\_\_\_

What is the ratio of areas?\_\_\_\_\_\_\_\_\_\_\_\_

What is the ratio of volumes?\_\_\_\_\_\_\_\_\_

The volume of the smaller prism is 24 cm3. What is the volume of the larger?\_\_\_\_\_\_\_\_\_\_\_

15. Two similar cones have lateral **areas** of 6π cm2 and 96π cm2. (reduce 1st)

What is the scale factor? \_\_\_\_\_\_\_\_\_

What is the ratio of perimeters?\_\_\_\_\_\_\_\_\_

What is the ratio of volumes?\_\_\_\_\_\_\_\_\_

The volume of the larger cone is 128 cm3. What is the volume of the smaller?\_\_\_\_\_\_\_\_\_\_\_